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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.
09/142,095	11/02/98	BURCHELL	B	MUR-7450

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EXAMINER	
TAYLOR, J	
ART UNIT	**PAPER NUMBER**
1655	19

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/142,095	Applicant(s) BURCHELL, BRIAN	
	Examiner Janell Taylor Cleveland	Art Unit 1655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 June 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☒ Claim(s) *13* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 7 recites the limitation "the DNA inner region" in line 4. There is insufficient antecedent basis for this limitation in the claim. Furthermore, this claim is confusing because it is not clear what "the inner region" means, and where exactly this inner region is. Appropriate correction is required.

3. Claims 1-11 provide for the use of a test in clinical drug trials, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 1-11 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by Bosma et al. (New England Journal of Medicine, Vol. 333 No. 18, pages 1171-1175.)

The claim is drawn to a kit for screening participants or potential participants in clinical drug trials, wherein the kit comprises primers for amplifying DNA in the region of the genome indicating the genetic basis of Gilbert's Syndrome.

Bosma et al. teaches the genetic basis of the reduced expression of bilirubin UDP-glucuronosyltransferase 1 (UGT1) in Gilbert's Syndrome. Bosma et al teaches that this region may be amplified by primers, which are specific for the region associated with Gilbert's Syndrome. (Page 1172, first column, last two paragraphs.) Therefore, Bosma et al fully anticipates claim 12 by teaching primers which amplify DNA in the region of genome indicating the genetic basis of Gilbert's Syndrome.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bosma in view of Sibille et al (Eur. J. Clin. Pharmacol. Vol. 39, pages 475-479, 1990).

Claim 1 is drawn to use of test in clinical drug trials as a method to improve the efficacy of such trials, which comprises the steps of screening samples from participants

or potential participants for the basis of Gilbert's Syndrome and eliminating participants having the genetic basis of Gilbert's Syndrome from the trial or including such participants in the trial and interpreting the results thereof based on the knowledge of such participant's posessing or not posessing the genetic basis of Gilbert's Syndrome. Claim 2 is drawn to use of a test as claimed in claim 1 wherein the method comprise the steps of: a) taking a sample from each participant or potential participant in a clinical drug trial, b) screening the samples for the genetic basis of Gilbert's Syndrome, c) identifying such participants having the genetic basis of Gilbert's Syndrome, and d) proceeding with the clinical drug trial based on the knowledge of such participants possessing or not possessing the genetic basis of Gilbert's Syndrome. Claim 3 is drawn to the sample being chosen from blood, buccal smear, or any other sample containing DNA from the participants. Claim 4 is drawn to the test of claim 1 wherein the method further comprises the step of eliminating participants having the genetic basis of Gilbert's Syndrome from the clinical drug trial. Claim 5 is drawn to the test of claim 1 wherein the method further comprises the step of selecting only participants on having the genetic basis for Gilbert's Syndrome for the clinical drug trial. Claim 6 is drawn to the test further comprising the step of interpreting the results of the clinical drug trial based on the knowledge that certain participants have the genetic basis of Gilbert's Syndrome as distinguished from participants adversely affected by the drug. Claim 7 is drawn to the use of the test of claim 1 wherein the method comprises the steps of: a) isolating DNA from each sample; b) amplifying the DNA inner region indicating the genetic basis of Gilbert's Syndrome; c) isolating amplified DNA fragments,

and d) identifying participants having the genetic basis for Gilbert's Syndrome. Claim 8 is drawn to the use of radioactively labeled pairs of primers. Claim 9 is drawn to the genetic basis for Gilbert's Syndrome being the gene of UGT. Claim 10 is drawn to the DNA to be amplified coming from the UGT1 exon 1 region. Claim 11 is drawn to the DNA to be amplified coming from the region between –35 and –55 nucleotides at the 5' end of UGT 1 exon.

Bosma et al. teaches the genetic basis of the reduced expression of bilirubin UDP-glucuronosyltransferase 1 (UGT1) in Gilbert's Syndrome. Bosma et al teaches that this region may be amplified by primers, which are specific for the region associated with Gilbert's Syndrome, particularly the promoter region which is found at the intron-exon junction of UTP1. (Page 1172, first column, last two paragraphs.)

Bosma et al does not teach a test in clinical drug trials which involves screening of the genetic basis for Gilbert's Syndrome.

Sibille et al. teaches a laboratory screening method for the selection of healthy volunteers. Specifically, Sibille teaches "the aim of laboratory screening in phase I is to exclude subjects with subclinical illness, who might be at increased risk in the study, and who might also adversely influence interpretation of the results." (Summary). Furthermore, Sibille et al teaches screening on the basis of abnormal levels of bilirubin, which is found in patients with Gilbert's Syndrome. (Table 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Bosma and Sibille. This is because, as Sibille taught, it would have been beneficial to remove those from a drug trial whose illness

might adversely affect the outcome of the results. Furthermore, it was known that abnormal levels of bilirubin would have affected the outcome of clinical drug trials. It would have been obvious to screen participants for Gilbert's Syndrome, as this condition would have led to skewed and inaccurate results at best, and may have also been to the detriment of the patient's health.

Summary

Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, and under 35 U.S.C. 101. Claim 12 is rejected under 35 U.S.C. 102(b). Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bosma in view of Sibille et al. Claim 13 is allowable because it teaches amplification primer pairs which are not found in the prior art, but is objected to for depending from a rejected claim.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janell Taylor Cleveland, whose telephone number is (703) 305-0273.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones, can be reached at (703) 308-1152.

Any inquiries of a general nature relating to this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Papers related to this application may be submitted by facsimile transmission. Papers should be faxed to Group 1634 via the PTO Fax Center using (703) 305-3014 or

305-4227. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG (November 15, 1989.)

Janell Taylor Cleveland

August 15, 2001

JEFFREY FREDMAN
PRIMARY EXAMINER